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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/762,639

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Dmitry E. Protsenko

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12/28/2007

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EXAMINER

VRETTAKOS, PETER J

ART UNIT

PAPER NUMBER

3739

MAIL DATE

DELIVERY MODE

12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/762,639	Applicant(s) PROTSENKO ET AL. CT	
	Examiner Peter J. Vrettakos	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35, 37, 38, 40, 46, 47 and 49-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35, 37, 38, 40, 46, 49, 52-56 is/are rejected.
- 7) ☒ Claim(s) 47, 50 and 51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The action is final.

The action relies upon a very basic principle in the electrosurgical arts: disclosure of AC makes obvious disclosure of DC. One patent (Arndt et al.) is shown as an example of this – more can be shown, need be.

Claims 35,37,38,40,46-47 and 49-56 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35, 37-38, 40, 46, 49 and 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (6,589,235) in view of Arndt et al. (5,904,709).

Wong discloses RF "electroforming".

35. An apparatus of electroforming tissue to reshape the tissue (Wong abstract) comprising:

means for creating stress in the tissue to temporarily define and maintain a predetermined shape of the tissue; and

means for causing a direct current (Arndt et al. col. 2:34-42) of a predetermined polarity to flow in the tissue to mediate the tissue while the created stress is present to permanently change shape of the tissue or material parameters of the tissue without necrosis or ablation.

37. The apparatus of claim 35 where the means for creating stress in the tissue comprises a molded electrode surface (Wong abstract) which mechanically applies a force to the tissue to create external stresses applied to the tissue to temporally define and maintain a predetermined molded shape of the tissue.

38. The apparatus of claim 35 where the means for creating stress in the tissue comprises means for changing material parameters of the tissue to create internal stresses in the tissue to permanently change its shape to the predetermined shape. Wong does this.

40. The apparatus of claim 35 further means for comprising monitoring the stresses in the tissue and means for controlling the direct current flowing in the tissue according to the stresses therein. See last sentence of the Wong abstract.

46. The apparatus of claim 40 where the means for monitoring the stresses in the tissue comprises means for monitoring color of the tissue as caused by a chemical dye disposed therein. Albumin disclosure makes obvious chemical dye. See Wong col. 7:4-5.

49. The apparatus of claim 35 where the means for causing a direct current to flow in the tissue comprises means for applying voltage pulses of the same polarity to form a DC pulse train. Made obvious by Arndt.

52. The apparatus of claim 49 where the means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for flowing direct current from a positive electrode to obtain tissue compression in the proximity of the positive electrode. The procedure made obvious by Wong and Arndt would inherently create compression near the positive electrode (similar procedures yield similar results).

53. The apparatus of claim 49 where the means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for flowing direct current from a negative electrode to obtain tissue lengthening in the proximity of the negative electrode. The procedure made obvious by Wong and Arndt would inherently create lengthening near the negative electrode (similar procedures yield similar results).

54. The apparatus of claim 35 where the means for creating stress in the tissue comprises means for creating tension, compression, shear or combinations thereof in the tissue by means of electroforming. The procedure made obvious by Wong and Arndt would inherently create combinations of stresses by means of "electroforming" (similar procedures yield similar results).

55. The apparatus of claim 35 where the means for causing a direct current to flow in the tissue comprises means for applying a DC voltage for a predetermined application time across two paired conductive elements in contact with the tissue. See Wong elements 33.

Claims 35, 38, 40 and 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al. (6,557,559) in view of Arndt et al. (5,904,709).

Eggers discloses RF "electroforming".

35. An apparatus of electroforming tissue to reshape the tissue (col. 5:60-67; col. 7:55-60; col. 12:15-20) comprising:

means for creating stress in the tissue to temporarily define and maintain a predetermined shape of the tissue; and

means for causing a direct current (Arndt et al. col. 2:34-42) of a predetermined polarity to flow in the tissue to mediate the tissue while the created stress is present to permanently change shape of the tissue or material parameters of the tissue without necrosis or ablation.

38. The apparatus of claim 35 where the means for creating stress (58,56) in the tissue comprises means for changing material parameters of the tissue to create internal stresses in the tissue to permanently change its shape to the predetermined shape.

40. The apparatus of claim 35 further means for comprising monitoring the stresses (temperature monitoring does this) in the tissue and means for controlling the direct current flowing in the tissue according to the stresses therein. See Eggers col. 8:50-58.

52. The apparatus of claim 49 where the means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for flowing direct current from a positive electrode to obtain tissue compression in the proximity of the positive electrode. The procedure made obvious by Eggers and Arndt would inherently create compression near the positive electrode (similar procedures yield similar results).

53. The apparatus of claim 49 where the means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for flowing direct current from a negative electrode to obtain tissue lengthening in the proximity of the negative electrode. The procedure made obvious by Eggers and Arndt would inherently create combinations of stresses by means of "electroforming" (similar procedures yield similar results).

54. The apparatus of claim 35 where the means for creating stress in the tissue comprises means for creating tension, compression, shear or combinations thereof in the tissue by means of electroforming. The procedure made obvious by Eggers and Arndt would inherently create combinations of stresses by means of "electroforming" (similar procedures yield similar results).

55. The apparatus of claim 35 where the means for causing a direct current to flow in the tissue comprises means for applying a DC voltage for a predetermined application time across at least two paired conductive elements (Eggers 58) in contact with the tissue.

Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Wong or Eggers in view of Arndt and further in view of Edwards et al. (6,071,280).

56. The apparatus of claim 55 where the means for applying a DC voltage for a predetermined application time across two paired conductive elements comprises means for placing a solid conductive element composed of conductive polymers in contact with the tissue. See Edwards col. 8:25-30.

Allowable Subject Matter

Claims 47, 50-51 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number:
10/762,639
Art Unit: 3739

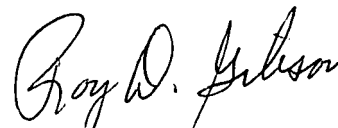
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Vrettakos whose telephone number is 571-272-4775. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pete Vrettakos
December 19, 2007



ROY D. GIBSON
PRIMARY EXAMINER